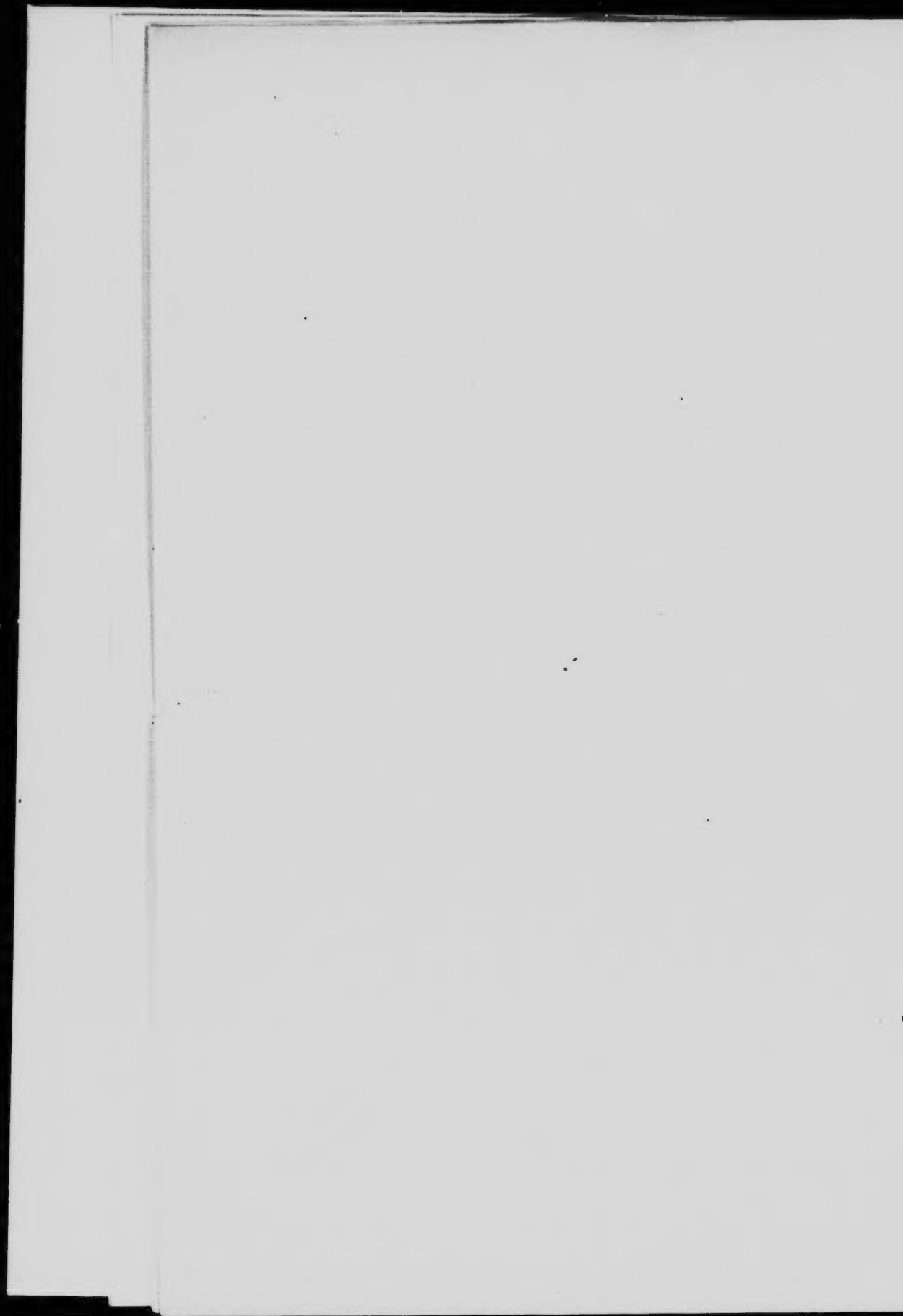
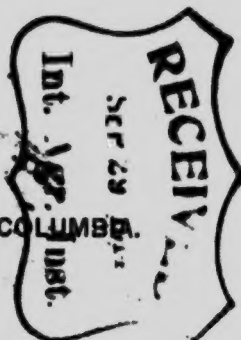




PROVINCE OF BRITISH COLUMBIA.

DEPARTMENT OF AGRICULTURE
(Live-stock Branch).



TUBERCULOSIS IN POULTRY.

By J. R. TERRY, CHIEF POULTRY INSTRUCTOR.

TUBERCULOSIS, or consumption, often referred to as liver-disease, or "going light," is one of the most common diseases of birds such as the common fowl, pea-fowl, ducks, turkeys, geese, pigeons, doves, grouse, partridges, pheasants, storks, cranes, canaries, finches, owls, swans, vultures, ostriches, crows, and parrots. There are several types of the micro-organism causing tuberculosis, and it is not known whether the avian type is responsible for the disease in all these species. It is believed that as many as 10 per cent. of the deaths among poultry from "natural causes" are due to tuberculosis, and in some districts, especially among turkeys, the proportion is much higher.

The relation of tuberculosis in birds to that in mammals is still an unsettled question. It is known that some birds, such as parrots and canaries, die of tuberculosis of human origin. The avian germ is not easily made to reproduce the disease in mammals, but experiments have resulted in its successful transmission to rabbits, guinea-pigs, and a cat, as well as pigs. Rats and mice are said to die of avian tuberculosis in bird-parks of zoological gardens, and in turn infect birds that feed upon their dead bodies.

SYMPTOMS.

The most common symptom is diarrhoea, with the droppings of a greenish-yellow colour. In the later stages, affected birds become very feeble and thin, the comb and wattles shrink in size and turn pale or dull purple in colour. The mucous membranes which surround the eye and line the mouth are also pale, and there is loss of appetite. Affected birds have an abnormal thirst,

being seen constantly drinking, and oftentimes allowing the water to run again from the mouth. Lameness is very often present, accompanied in many cases by local swellings of the joints or on the skin, especially about the feet and legs. The affection known as "bumble-foot" is often tubercular in origin, and birds so affected should not be kept with other fowls, but killed and burnt. The disease is usually of a protracted nature, ending in paralysis and death.

Tuberculosis is caused by a bacillus or germ, and the parts of the body usually first attacked are the intestines, liver, and spleen, the germs being taken in with food which has been contaminated by contact with the droppings of affected fowls. The bacteria are very numerous in the diseased tissue, much more so than in human or bovine tuberculosis. They leave the body almost entirely through the discharges, and enter with the food almost exclusively. The feeding habits of chickens tend to rapidly spread the disease, and failure to keep pens constantly clean and disinfected increases the chances of infection. Cases have been known of the disease having been conveyed from one yard to another by means of infected manure carried on the shoes. Examination of the body after death reveals small whitish patches, or tubercles, in the liver, spleen, and on the lining of the intestines, but these may be found in other parts of the body also.

PREVENTION AND TREATMENT.

It is almost impossible to treat this disease successfully, and attention should, therefore, be directed to methods of prevention.

Where an outbreak occurs it is safer to clear off the entire stock; then to apply freshly burned lime to the ground and rear fresh stock in new houses on new ground. It is a great mistake to retain for breeding, birds which become sickly, or which, when isolated and carefully treated for a few days, do not respond to treatment. All such birds should be killed and burnt. If it is desired to utilize the buildings in which tuberculous stock has been housed, they should be thoroughly disinfected with some reliable disinfectant, or carbolic acid, and allowed to remain unoccupied for at least six months. In the meantime, several whitewashings should be administered. The losses from the poultry "white plague" would be appreciably reduced if such precautions were adopted.

Where poultry are kept in confinement, overcrowding of the runs should be avoided; a change to fresh ground should be frequently arranged, if possible; and lime should be used as a top dressing for the runs. Cropping with wheat, rye, oats, rape, or kale will also sweeten the land, and at the same time provide green food. Hen-houses should be roomy, dry, bright, well ventilated, and kept scrupulously clean. They should be whitewashed at least once yearly. The disease develops rapidly in an atmosphere of dirt, damp, and darkness. Wet mash should be given in troughs, and should not be thrown on ground likely to be contaminated with the droppings of other fowl, because, as already stated, infection is received with the food.

To sum up, destroy all affected birds; breed only from healthy stock; keep the houses clean; allow sufficient light and ventilation; disinfect all drinking-water with permanganate of potash, and see that pans are scalded at least twice a month; periodically change the fowls to fresh ground; wherever possible, adopt the colony system of housing, with free range; in purchasing fresh stock, quarantine for at least ten days, not necessarily in the shipping coop or box—an empty pen is the proper place for this purpose; and in the event of disease breaking out notify the Department, and, if necessary, a personal visit will be paid by a member of the staff, and the disease diagnosed, and line of treatment advised.

**CIRCULAR BULLETINS ISSUED BY LIVE-STOCK BRANCH OF THE
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“ “ 2.—“Tuberculosis in Poultry.”

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